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FILE**

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	GEN Docket No. 90-314
)	ET Docket No. 92-100
Amendment of the Commission's)	
Rules to Establish New Personal)	RM-7140, RM-7175, RM-7617.
Communications Services)	RM-7618, RM-7760, RM-7782
)	RM-7860, RM-7977, RM-7978
)	RM-7979, RM-7980
TO: The Commission		

**COMMENTS OF
TELEPHONE & DATA SYSTEMS, INC.**

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SUMMARY

Telephone and Data Systems, Inc. presents here its recommendations to help achieve the Commission's four fundamental goals for these proceedings. Even at this early stage of PCS development, it is already apparent that these technologies have the potential to transform public telecommunications over the next decade. Industry analysts have estimated that within this period 60 million persons (over and above current users of cellular, paging and dispatch radio services) will subscribe to PCS-based services.

The enormous job of transforming PCS technology into a "family" of services will require the skills of numerous and diverse PCS providers. The regulatory environment we propose would create opportunities for all to participate in the implementation of PCS technologies. Open entry, without eligibility restrictions will give all potential PCS providers a full and fair opportunity to develop applications for this technology to serve the needs and interests of the public.

The key to the rapid transformation of PCS from a concept to reality is for the Commission to adopt promote numerous and diverse opportunities for PCS deployment. The Commission should allocate and channelize PCS spectrum for five providers (each with 20 MHz of paired spectrum) in each service area. This will

permit a large and diverse group of providers to help launch diverse PCS operations so that customers can choose among competing systems, development of innovative uses of PCS spectrum such as specialized or "niche" uses, price competition and accelerated deployment through competition for market share.

We propose licensing based on MSA/RSA service area boundaries because there are corresponding public benefits from PCS development based on "local" needs. The benefits include the high likelihood of rapid build-out, broad system coverage, innovative service offerings tailored to local needs and sensitivity to local market needs.

LECs and cellular operators should not be restricted in any way from holding PCS licenses. The participation of LECs in the initial deployment of PCS will be critical to its widespread and rapid deployment. The benefits to the public from early deployment, lowered costs of LEC provided PCS and reduced market risks of implementation are substantial. This will be especially true in rural areas which have frequently been the last to receive the benefits of advanced technologies.

Cellular operators also have an important contributions to make to PCS deployment. The cellular industry has demonstrate strong qualifications to develop advanced technologies. In the highly competitive market conditions which will control development, there is no reason to restrict their participation.

PCS should be regulated as a common carrier service based on the Commission's own analysis of the "universal" scope of projected demand. It is essential that basic consumer rights be protected and that related state and local regulatory oversight be preserved.

Selection of PCS licenses should be accomplished by lottery subject to stringent antispeculation safeguards. We support use of abbreviated application filings which require at a minimum firm financial commitments. The amount of the financial commitment should be established by the Commission. Application filing fees should be fully compensatory; pre-lottery settlements should be prohibited; and the Commission should not select contingent lottery winners.

In the interest of promoting the development of PCS, the

licenses should be issued any time after construction authority is granted.

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COMMENTS OF
TELEPHONE & DATA SYSTEMS, INC.

Telephone and Data Systems, Inc., on behalf of itself and its subsidiaries (collectively "TDS"), by its attorneys, submits its comments in response to the Commission's Notice of Proposed Rulemaking and Tentative Decision released August 14, 1992 in the above-captioned proceeding ("PCS NPRM").

As a provider of telephone, cellular and paging services, TDS is vitally interested in the early development and implementation of personal communication services ("PCS") as an essential step towards the improving and expanding of the broad range of services which it offers to its customers. For many years, TDS has been actively involved in expanding the scope and quality of

telecommunication services available in the areas which it serves. It has acquired and built "state-of-the-art" local telephone exchange facilities primarily in rural areas, small towns and some suburban communities. It has deployed digital switching and digital transmission systems in these areas and is introducing SS7. TDS expects that spectrum-efficient, cost effective applications of PCS technologies will provide its customers unprecedented access to state-of-the art capabilities made possible by advances in digital switching and the introduction of SS7.

TDS is also interested because the 2 GHz broadband PCS spectrum will provide opportunities to enhance and expand the range of services it offers in areas where it does not have exchange operations. TDS, through its subsidiary American Portable Telecommunications, Inc., is currently conducting a program of experimentation on 2 GHz broadband spectrum to develop and implement innovative new PCS services which it envisions will be a significant addition to the PCS "family" of wireless services¹. The service concept being developed by TDS's subsidiary integrates many new state-of-the-art capabilities to allow PCS users an unprecedented ability to control their incoming calls. The architecture for this new service permits cost effective

¹ Additional information has been filed by American Portable Telecommunications, Inc. in the Progress Report submitted on June 25, 1992 pursuant to grants of experimental authority, Call Sign KK2XAV.

spectrum-efficient operations without sacrificing features, performance or service quality. TDS's experimental program is the first step of many which it expects to take in the development of the exciting opportunities which these PCS technologies will make possible.

INTRODUCTION

TDS, as in prior filings in General Docket No. 90-314 and related proceedings, strongly supports the Commission's initiatives to make 2 GHz broadband PCS a reality with the least possible regulatory delay.

The Commission has already received confirmation from many participants in prior phases of these proceedings of the large public demand for innovative service offerings that PCS technologies will provide. Aspects of many of these services are already being demonstrated in the PCS experiments of well over 150 companies, including TDS's subsidiary American Portable Telecommunications.

In the next critical phases of these proceedings, the Commission will make allocations of spectrum for PCS technologies and establish the regulatory structure for licensing of 2 GHz broadband and 900 MHz narrowband PCS operations. We support the

achievement of the four fundamental "values" listed in its PCS NPRM as appropriate guides in these important deliberations.

We present here a series of recommendations which are designed to promote the most rapid and efficient development possible of the full potential of PCS technologies. We believe that by fostering open competition among numerous and diverse providers and opportunities to develop new and innovative applications of PCS technology in numerous and diverse "local" service areas the Commission will best achieve the four "values" which it has listed as its guidelines in this proceeding. Specifically, we recommend:

- (a) Frequencies should be allocated to permit grant of up to five 20 MHz PCS system licenses per service area;
- (b) 2 GHz service areas should be defined in "local" service areas corresponding to MSA/RSA boundaries;
- (c) Eligibility to hold PCS licenses should be open to all potential applicants. Established service providers, including LECs and cellular licensees, should not be excluded;
- (d) 2 GHz broadband PCS should be given a common carrier regulatory classification; and
- (e) Lottery selection procedures should be used subject to stringent requirements to deter the filing of applications by speculators.

These and other closely related aspects of the issues and proposals before the Commission affecting allocation of 2 GHz broadband PCS spectrum are discussed in the following sections of these comments and in the attachment to these comments prepared by Economist Steven S. Wildman, Associate Professor of Communication Studies and Director, Program in Telecommunications, Science, Management Policy, Northwestern University, entitled "Economically Efficient Licensing Policies for Personal Communication Services, " ("Wildman Statement").

DISCUSSION

- (1) The Commission Should Allocate PCS Spectrum For Five PCS Providers Per Service Area.

We support allocation of adequate spectrum and channelization of the 2 GHz PCS frequencies to permit in any service area five licensed PCS service providers, each with 20 MHz of bandwidth or a total of 100 MHz of licensed paired spectrum in each service area.

The Commission should provide opportunities for the largest and most diverse group of PCS service providers in each service area that its available 2 GHz spectrum resources will permit. This is necessary to promote the rapid development of diversified and efficiently designed PCS technologies and services. There is

no reason to limit the number of providers arbitrarily to the minimum of three as initially proposed in the NPRM.

The public benefits from permitting a large and diverse group of providers to launch new PCS-based services include opportunities for access to diverse PCS operations so that consumers can choose among competing systems, development of innovative uses of PCS spectrum including specialized or "niche" uses of PCS, price competition and accelerated deployment of PCS through competition for market share. See Wildman Statement ("Wildman Statement"), Section II, pp 8-27 and Section III, pp 36-37.

Based on the evidence of numerous experimental filings, telephone, cellular, SMR, CATV, alternative access, public and private paging, public and private land mobile, mass media and other communications providers all can be expected to participate in a broadly competitive deployment of PCS technologies. The public benefits from their early participation in PCS are described in their pioneer preference requests and the progress reports of their experimental operations on file with the Commission.²

² See pioneer preference requests and/or experimental progress reports file by Advanced Mobilecom Technologies, American Portable Telecommunications, Inc., Ameritech Direct Communications, Inc., Bell Atlantic Mobile Systems, Inc., BellSouth Enterprises, Inc./BellSouth Services, Inc., Buckeye Cablevision, Inc., Cablevision Systems Corporation, Cincinnati Bell Telephone Company, Continental Cable Vision, Cox Enterprises, Inc., LiTel

By expanding opportunities for five PCS providers per service area, the Commission also would make possible competitive entry for many entrepreneurial and start-up companies. Judged by the PCS experimentation documented in progress reports filed by some of these companies, they also can be expected to spur competition by developing innovative service offerings and by promoting the rapid deployment of PCS technologies.

The Commission has also mentioned the important impact which the rapid development of PCS could have to encourage American manufacturers to develop innovative portable radio-based communications equipment and services. We underscore this point and add that a broadly competitive PCS market structure, such as we propose, provides opportunities for a number of manufacturers to develop market share. In the long run, we believe that having numerous PCS licenses will promote competition among manufacturers, particularly to supply the portable customer terminals. This competition will enhance quality, performance and ultimately lead to reduced prices to all customers for PCS-based services.

Telecommunications Corp., Motorola, Inc., NYNEX Corporation/NYNEX Science and Technology, Inc., Southwestern Bell Personal Communications, Inc., Pacific Telesis Group, Personal Communications Network Services of New York, Inc., SATCOM, Inc., Time Warner, Inc., VIACOM International, Inc., among others.

- (2) PCS Service Area Should Be Defined Only In Terms Of "Local" Service Areas Corresponding To Metropolitan Statistical Area and Rural Service Area Boundaries.

We support adoption of a service area design based exclusively upon the 734 Metropolitan Statistical Areas ("MSA") and Rural Service Areas ("RSA")³. These are established and well-understood geographic descriptions of "communities of interest." They adequately describe where "people on the move" will need PCS based services in terms of where they live, work, shop, worship, go to school, are entertained and obtain medical assistance. We see no need to reinvent the concept of what constitutes a "local" service area in this proceeding.

The public benefits from use of "local" service areas arise in part because they make opportunities available for businesses to orient service development to the unique needs of each BTA market area. The immediate benefits of encouraging locally oriented development of PCS include: the high likelihood that such businesses will implement a rapid build-out, broad system coverage, innovative service offerings tailored to local needs and sensitivity to evolving local market needs. The public benefits of such local service derive in part from the fact that in "local" areas PCS operators can be expected to implement PCS services based upon priorities and economic efficiencies which

³ See FCC Public Notice, "Cellular MSA/RSA Markets and Counties," (Report No. 92-40), January 24, 1992

are responsive to the needs and conditions in such areas.⁴ The full benefits of roaming capabilities will also be available to the customers of local PCS licensees. This is already proven by the example of cellular marketing consortia and the use of common trade names (such as Cellular One), and local operators organizing to work closely together to support intersystem interoperability and roaming.

Adoption of MSA/RSA "local" service areas is also important to create incentives for the development of PCS in rural and underserved areas by establishing licensing opportunities for PCS applicants who will be specifically focusing on providing service in such areas. The need for special Commission attention to the early development of PCS in rural areas includes promoting the rural development, making sure that the benefits of innovative technologies are promptly introduced in rural areas (and not delayed to permit licenses in urban areas to commence service first as was the case with cellular), enhancing the quality of rural life, supporting the needs of existing businesses located in rural areas and enhancing public safety in isolated areas through improved portable communications. If the Commission were to award authorizations for nationwide, Rand McNally Major Trading Area ("MTA"), LATA-wide PCS ("LATA") and Rand McNally Basic Trading Area ("BTA") systems, the licenses in such areas would be

⁴ Nor is there any evidence that MSA/RSAs are too small to permit viable operations for the reasons presented in Professor Wildman's Statement, Section II, pp 35-36.

focused on wide-area services and the needs of densely populated urban core areas. In contrast, the holder of a license to serve a smaller MSA or RSA would be committed to constructing and operating in that area and thus can be expected to meet these commitments more rapidly than a licensee of any nationwide, MTA, LATA or BTA service area.

We have already described how licensing five PCS systems per service area will have important public benefits by providing opportunities for a large and diverse group of providers. The use of MSA/RSA service areas will expand the number and diversity of this group far beyond what would be otherwise possible under nationwide, MTA, LATA, or BTA service areas. Providers who are not financially capable of implementing nationwide, MTA, LATA, or BTA systems will also have a fair opportunity to develop systems. Particularly at this early stage of the development of PCS technologies and services, the Commission should be fostering the broadest possible participation of qualified service providers to encourage development of diverse PCS service offerings.

We strongly oppose nationwide, MTA, LATA and BTA service areas because we believe none of these is suitable to implement PCS technologies to provide totally new "universal" public communications services. It is neither intuitively logical nor demonstrated in current PCS experimentation that PCS must be operated under nationwide, MTA, LATA or BTA licensing. The case against

establishing such enormous service areas for PCS licensing is in part a restatement of all of the public benefits from use of "local" MSA/RSA service areas described above.

There is also the fundamental unfairness of awarding any PCS license for a nationwide, MTA, LATA or BTA system. Of necessity, the licensing decision would rest almost exclusively upon the unique financial qualifications of the few huge, rich businesses with the deep pockets necessary to compete in the contest for these licenses. Awards made to these special few businesses would also present very serious regulatory issues. Nor should any business or group of businesses be given the unfair competitive advantage of government-conferred dominance in a new "universal" PCS industry by the granting of nationwide, MTA, LATA, or BTA licenses.

There is no reason to assume that such a nationwide/regional "leadership" group will actually take steps to reduce costs to the consumer for PCS services, promote roaming or hasten the deployment of PCS throughout the U.S. These actions can be accomplished better by "local" PCS licensees and established industry standards bodies. As described in Professor Wildman's Statement, the Commission's analysis of recent trends in cellular industry ownership omits critically important factors which must be considered to determine whether adoption of nationwide, MTA, LATA or BTA service area definitions will promote economic

efficiency. He explains that with the major portion of the most significant development of PCS technologies and services still to be completed, large service areas will adversely limit the number of truly independent real world market experience by obscuring important differences in the geographic subregions which are included within them. (Wildman Statement, Section II, pp 21-26). He discusses how the marketplace can do a better job of identifying effective managers and owners at this stage if it starts with a large pool of managerial and ownership candidates rather than the limited numbers which would qualify under nationwide, MTA, LATA or BTA licensing. (Wildman Statement, Section II, pp 27-28). He also describes how large service areas tend to promote development focusing on "...common denominator services with broader geographic appeal and make the services targeted to the needs of local communities less likely" (Wildman Statement, Section II, pp 21-26). He also concludes that mechanisms unrelated to any possible economic efficiencies of large service area operations may also be responsible for the clustering of cellular ownership (Wildman Statement, Section II, pp 29-34).

Nor is there any advantage to mixing nationwide, MTA, LATA or BTA service areas with MSA/RSA service area sizes. As discussed in the Wildman Statement, Section II, pp 34-35, large service areas slow the development of the most effective PCS services and the identification of the qualified managers of PCS systems. As Professor Wildman explains, there are clear advan-

tages to starting out with small license areas for all licensees and letting the market determine the most efficient size of service area for the various PCS approaches and operators that may emerge (Wildman Statement, Section II, pp 15-26).

(3) The Eligibility Of LECs To Hold PCS Licenses Should Not Be Limited Because Of Cellular Holdings.

We agree with the Commission's tentative conclusion that "...there is a strong case for allowing LECs to provide PCS within their respective service areas" and that they should not be barred from holding 2 GHz PCS licenses outside their service areas.⁵ LECs like many other operators of existing telecommunication facilities, including CATV, SMR, land mobile, paging, alternative access and other businesses, should have a full and fair opportunity to integrate PCS technologies into their existing operations. We support adoption of a regulatory structure which encourages robust competition among numerous and diverse service providers as a healthy and appropriate means to assure that the public benefits made possible by PCS technologies are achieved as broadly and rapidly as possible.

The full participation of the LEC industry is essential to achieve the Commission's objectives of "universality," "speed of

⁵ PCS NPRM, Paragraphs 75 and 77, Fn. 52.

deployment," "diversity of services," and "competitive delivery"⁶ for all of the reasons described above. The public benefits from LEC deployment of PCS are unique, pervasive and fundamental, particularly in rural areas and small communities. We strongly oppose any bar upon the holding of PCS licenses by LECs or any restriction otherwise limiting the LECs to only a portion of the channel capacity granted for implementation of any PCS system.

As the part of the telecommunications industry with long-standing "public service" common carrier responsibilities to provide essential services universally to the American public, LECs already have strong incentives to deploy PCS technologies as the next step in the evolution of the core public switched telephone network. The Commission has numerous examples of service applications for PCS documented in experimental programs by exchange carriers of all sizes, in urban, suburban and rural settings and involving a wide range of new service offerings. Considering the long tradition within the LEC industry of providing high quality services at affordable prices by incorporating service and technology improvements into the public network, the public will clearly benefit from permitting and strongly encouraging this PCS evolution of the public switched network.

The public benefits from LEC participation arise from early deployment, lowered costs and reduced market risks of imple-

⁶ PCS NPRM, Paragraph 6.

menting this new technology into their ubiquitous networks. LECs have the knowledge of local market needs, the human and financial resources, and the technical qualifications to lead the development of PCS technologies. By using existing landline links to switching offices, centralized provisioning and billing services and marketing, advanced intelligent network capabilities, LECs will be able to implement PCS capabilities quickly and without expensive duplication of established infrastructure. LECs also can be expected to make important contributions in developing PCS quality/reliability standards, in defining interface standards, in promoting interoperability and in making possible the early uses PCS for public safety (i.e. "911") services. The participation of the LEC industry in the initial deployment of PCS would be critical to the widespread public acceptance and rapid deployment of PCS.

The Commission should also consider the importance to the ratepaying public of permitting LECs to integrate PCS technologies into their existing communications infrastructure to meet traditional as well as new customer service needs. Uses of PCS to provide wireless local loop access would result in significant savings in capital and operating costs associated with exchange operations.⁷ Given the overriding importance of preserving the ability of LECs to meet their universal service obligations, the

⁷ See "Economic Analysis of Wireless Loop," Progress Report of NYNEX Science and Technology, Inc., dated July 14, 1992 in File No. 1563-EX-PL-90; Call Sign KF2XEG.

Commission should not handicap the efforts of any LEC to achieve savings that benefit the ratepaying public and support the fundamental goal of universal service. The adverse impact on universal service if LECs are denied the opportunity to implement PCS technologies is discussed in Professor Wildman's Statement, Section IV, pp 37-46.

In rural areas and smaller communities, the major role of the LECs as "providers of last resort" required to serve all customers on a non-discriminatory basis underscores their need to have unfettered access to PCS technologies. Precluding the logical augmentation of existing services and technologies by LECs could well deny customers in these areas the benefits of important advances in traditional and new services made possible by PCS. The opportunities for advanced PCS technologies to permit basic services to be provided in areas not now served and to achieve cost savings in the provision of existing services would be lost. And the important contribution of rural exchange providers to rural economic development, endorsed by the NTIA Telecom 2000 Report, would also be stifled.

Some of the proposals on which the Commission has requested comment appear to be based upon the totally unwarranted speculation that LECs somehow have incentives to use PCS technologies in some anti-competitive way or to "warehouse" PCS spectrum to deny its use to others. The evidence of the widespread PCS experi-

mentation by LECs and their active participation in the Commission's PCS proceedings plainly contradicts any such speculation about "warehousing". If the Commission has specific concerns about discrimination and cross-subsidization by any LEC, non-structural safeguards would adequately address such matters. Concerns about "warehousing" of PCS spectrum can be handled by requiring compliance with a five-year "fill-in" requirement comparable to current cellular policies i.e. Section 22.31 (a)(i) or 22.31 (f) of the Commission's rules.

The separate assumption that LECs will have access to cellular spectrum with which to implement PCS-type capabilities so that they do not need 2 GHz PCS spectrum is also based upon unfounded speculation. The vast majority of independent LECs do not control or operate cellular systems encompassing their landline service areas. In cases where a LEC may have any minority/non-controlling interest in cellular operations encompassing its landline service area, cellular spectrum may not be available because such limited interests do not permit participation in management decisions. The LECs involved clearly cannot rely upon access to cellular spectrum with which to implement PCS-type services to meet the needs of customers in their landline service areas.

The Commission should also consider that requiring LECs to implement PCS look-alike services via cellular spectrum will

effectively split the LEC industry into groupings of carriers, some of whom only can use cellular spectrum and others who can use 2 GHz PCS spectrum. This split will vastly complicate development of interoperability standards, will complicate roaming capabilities and contribute to disparities in the pricing and availability of advanced PCS-type services. The arbitrary separation of the LEC industry into two such groups is plainly contrary to the Commission's fundamental interests in achieving universality and speedy deployment of PCS.

The Commission's preliminary analysis of its options also fails to take account of the fact that the capacity limitations, economic constraints, commitments to support analog as well as digital cellular services, and technical restrictions imposed by established network architectures for cellular services greatly inhibit, if not preclude, use by LECs of cellular spectrum for PCS-type services. For example, deployment of basic LEC services such as wireless loop access would be needlessly complicated, if not unworkable, because of the factors mentioned above. Also, the restrictions, limitations and cost penalties of implementing any PCS "look-alike" service by superimposing PCS architectures and technologies upon established cellular operations significantly limits the range of services and opportunities for fully competitive pricing of advanced and innovative services which can be offered in this manner. By adopting rules which impose such constraints upon LECs with cellular holdings, the Commission

would be significantly impairing, if not denying, to the public the many benefits anticipated from LEC implementation of advanced PCS technologies.

As explained above, full and fair participation in the launch of PCS technologies is essential to obtain many of the core "values" which the Commission supports in these proceedings. In a regulatory structure, which offers opportunities for robust competition among numerous and diverse PCS providers, there is no reason to handicap the efforts of LECs by giving them less PCS spectrum than their competitors. Particularly in rural areas and small communities which have traditionally been the last to receive the benefits of advanced technologies, the adverse impact of preventing LECs from having a full and fair opportunity to implement a full range of PCS-based services is plainly inconsistent with policies supporting rural infrastructure development.

- (4) The Commission Should Permit Cellular Operators To Hold PCS Licenses To Serve Areas Which Overlap Their Cellular Service Areas.

We support open eligibility free from special restrictions upon cellular carriers, LECs or any other businesses. The Commission should permit cellular operators to hold PCS licenses to serve areas which overlap their cellular service areas. The regulatory environment which we propose would create opportunities for numerous and diverse PCS providers to participate in

the implementation of PCS technologies with a full and fair opportunity for each to develop the applications which each determines to serve best the needs and interests of the public. The many PCS experimental programs which the Commission has authorized give some indications of what those advanced services will be, but do not tell the whole story. With much development and real world commercial testing yet to be completed, the full range of services and the cost characteristics of the systems to support such services are still largely unknown.

The most appropriate way to promote the early development of the complex "family" of PCS-based services is to encourage widespread development efforts by not foreclosing any potential competitor from having a stake in the emerging PCS industry. The cellular industry has already demonstrated its energy and ability to develop new technologies, to invest human and financial resources in infrastructure development, to promote spectrum efficiency and to look for new, valuable uses of spectrum.⁸ The recent evidence of the invaluable services rendered by the cellular and paging industries during and after the devastation of South Florida by Hurricane Andrew underscores how well cellular and paging operators have been able to fulfill their public service responsibilities. At a time when the Commission should

⁸ Professor Wildman describes that there are likely to be significant economies of scope between PCS and cellular operations which could produce publicly beneficial cost savings. (Wildman Statement, Section V, pp 46-48.)

be attempting to enlist the support of potential applicants with proven credentials in public service in the next critical phases of PCS development, excluding cellular would be plainly contrary to the fundamental "values" by which the Commission proposes to guide its decision making in this proceeding.

The Commission's expressed concerns about possible incentives for cellular operators to deter entry of independent competitors in cellular market areas appear to be based upon the false assumption that such efforts will somehow preserve cellular industry profits. This assumption is clearly insupportable if the Commission adopts channelization of 2 GHz PCS spectrum to accommodate five licensees per service area, as we have proposed. The Commission's discussion also does not adequately recognize the impact of numerous Commission initiatives during recent years to encourage development of competitive alternatives to cellular capabilities. Enhanced Specialized Mobile Radio Services, Mobile Satellite services, Low Earth Orbit satellite services, 220-222 MHz narrowband services as well as enhanced versions of conventional Land Mobile services are or will be competitive with cellular. Considering the capabilities of these many competitive alternatives, including all of the new PCS licensees, it hardly seems plausible that any cellular operator would "warehouse" PCS spectrum, as anticipated by the Commission, when by far the greatest beneficiaries of such action would be his competitors.